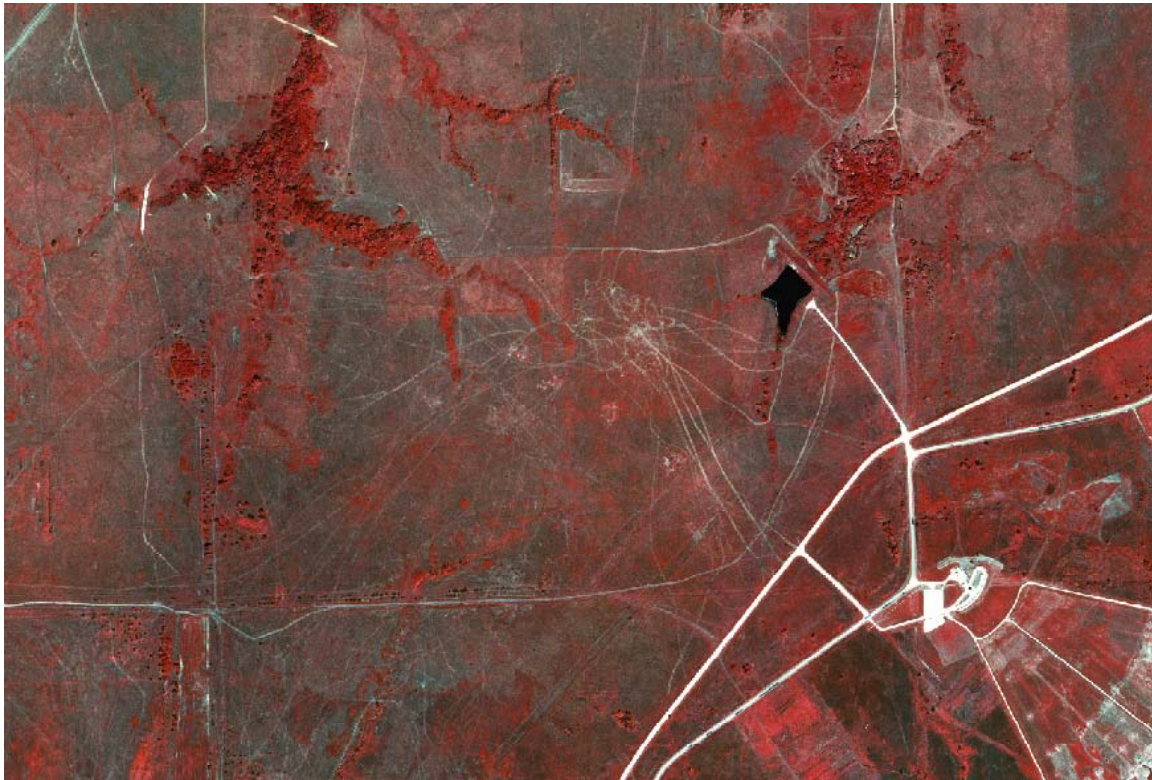


Remote Sensing

One of the primary factors that allow military land managers to remain effective lies in the ability to identify key areas in need of treatment quickly and accurately. Ecological field surveys (i.e. LCTA) alone only represent a small sample of the landscape. Therefore, application of all available technologies helps to optimize land management analyses and decisions on military installations.

Remote sensing techniques are a powerful tool to aid in this process. Remote sensing can be defined as any methodology employed to study the characteristics of objects using data collected from a remote observation point. Aerial photography and satellite imagery provides snap-shots of a specific location at different points in time. For example, photos of a training area taken before and after the land was in the stewardship of the U.S. Army. The use of aerial photography and satellite imagery provides the LRAM Coordinator with tools that help determine how military training is affecting the training lands on the installation.



Infrared imagery of military maneuver and training lands next to a firing range on a military installation.

Remotely sensed vegetation data can be a cost-effective method for augmenting site surveys. Some applications such as military vehicle traffic

patterns can be easily identified using remotely sensed data. However, a relationship, or correlation, between remotely sensed data and ecological field surveys must be established before remotely sensed data can be translated to ecological information of use to resource managers on training and testing installations.

Interpretive photogrammetry involves recognizing objects from their photographic images and judging their significance. Cameras, films, plotting instruments, and techniques have been improved continually so that photogrammetrically prepared maps today meet very high accuracy standards. Other advantages of this method of mapping are:

- Speed of coverage of an area
- Relatively low cost
- Ease of obtaining topographic details, especially in inaccessible areas
- Reduced likelihood of omitting data due to the tremendous amount of available detail.



Color satellite image of maneuver and training lands adjacent to a firing range on a military reservation.

The Remote Sensing User's Guide is an excellent reference that describes remote sensing techniques.

[Remote Sensing User's Guide](#)